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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,062	07/30/2001	Keith Alexander Harrison	30006786-2	2570

7590 08/31/2005

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
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EXAMINER

DAVIS, ZACHARY A

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 08/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/918,062

Applicant(s)

HARRISON ET AL.

Examiner

Zachary A. Davis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. A response to Notice of Non-Responsive Amendment was received on 01 July 2005. The amendment received on 16 May 2005 will now be considered fully. Claims 1, 3, 5, 9, 11, and 14-19 have been amended. No claims have been added or canceled. Claims 1-19 are currently pending in the present application.

### ***Specification***

2. The Examiner thanks Applicant for the careful attention to correcting errors in the specification.

3. The Examiner notes that the title of the invention has been amended to "Authenticating Facsimile Documents Using Digital Signatures" as suggested in the Office action mailed 13 January 2005.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-12 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linsker et al, US Patent 5598473, in view of Mazzagatte et al, US Patent 6862583.

In reference to Claims 1, 5, and 8, Linkser discloses a method for determining the authenticity of a fax document (column 2, lines 23-27) that includes receiving a document and a digest of the document created by a hash algorithm and encrypted with a first token of the sender, which is the sender's private key (column 4, lines 54-60, where digest signature DS is the encrypted digest); obtaining a second token of the sender, which is the sender's public key, relating to the private key (column 4, lines 57-65); decrypting the digest with the public key (column 5, lines 20-23); creating a second digest using a hash algorithm (column 5, lines 23-27, and column 4, lines 25-35); and comparing the decrypted received digest with the second created digest (column 5, lines 23-42). However, although Linsker discloses authenticating the sender of a document, Linsker does not explicitly disclose verifying the identity of the intended recipient of a document.

Mazzagatte discloses a method for authenticated secure printing, which can be implemented for fax documents (column 4, lines 35-37), and which includes receiving and securely retaining a digital document and a transmitted independently verifiable data record of an intended recipient at a printout station (column 8, line 20-column 9, line 7; noting column 8, line 63-column 9, line 1, where the data is securely stored at the printer; further noting column 8, lines 20-29, where the digital certificate is the independently verifiable data record); obtaining a first token of the intended recipient (column 8, lines 37-43); requesting proof of the intended recipient's identity at the printout station using the independently verifiable data record (column 9, lines 49-51); and releasing the document when the intended recipient's identity has been proven by use of second token of the intended recipient that is related to the recipient's first token (column 9, lines 46-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Linsker by including verification of the intended recipient in addition to authentication of the sender, in order to ensure that printout of sensitive documents is authorized and that print data is securely stored (see Mazzagatte, column 2, lines 7-10).

In reference to Claims 2 and 3, Linsker further discloses receiving a digital certificate of the sender and that the public key is part of the certificate (column 5, lines 2-13).

In reference to Claim 4, Linsker further discloses checking the validity of the certificate online (column 5, lines 6-13).

In reference to Claims 6 and 7, Linsker further discloses printing the document with a verifying mark once it has been authenticated (column 6, lines 3-29).

In reference to Claims 9, 10, and 17, Linsker discloses a method of sending a fax document (column 2, lines 23-27) that includes creating a digest of the document using a hash algorithm (column 4, lines 25-35); encrypting the digest with a first token of the sender, which is the sender's private key (column 4, lines 40-47); obtaining a second token of the sender, specifically the sender's public key, that will be used to decrypt the encrypted digest; and sending the encrypted digest, the document, and the public key to the recipient (column 4, lines 50-53). However, although Linsker discloses authenticating the sender of a document, Linsker does not explicitly disclose verifying the identity of the intended recipient of a document.

Mazzagatte discloses a method for authenticated secure printing, which can be implemented for fax documents (column 4, lines 35-37), and which includes receiving and securely retaining a digital document and a transmitted independently verifiable data record of an intended recipient at a printout station (column 8, line 20-column 9, line 7; noting column 8, line 63-column 9, line 1, where the data is securely stored at the printer; further noting column 8, lines 20-29, where the digital certificate is the independently verifiable data record); obtaining a first token of the intended recipient (column 8, lines 37-43); requesting proof of the intended recipient's identity at the printout station using the independently verifiable data record (column 9, lines 49-51); and releasing the document when the intended recipient's identity has been proven by

use of second token of the intended recipient that is related to the recipient's first token (column 9, lines 46-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Linsker by including verification of the intended recipient in addition to authentication of the sender, in order to ensure that printout of sensitive documents is authorized and that print data is securely stored (see Mazzagatte, column 2, lines 7-10).

In reference to Claims 11 and 12, Linsker further discloses proving the sender's identity by transferring data from a personal portable data carrier holding the private key to the transmission station from which the document will be sent, and that the sender enters a verifiable security identifier to establish the sender's identity (column 7, lines 13-21).

In reference to Claims 14-16, Linsker further discloses obtaining details of the sender, including the public key, from a central database, and providing the details and public key in a digital certificate (column 4, lines 50-53; column 5, lines 2-13).

Claims 18 and 19 are apparatus claims corresponding substantially to the methods of Claims 1 and 9, and are rejected by a similar rationale.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Linsker in view of Mazzagatte as applied to claim 11 above, and further in view of Clark, US Patent 5448045.

Linkser and Mazzagatte disclose everything as applied above in reference to Claim 11. However, Linkser and Mazzagatte do not explicitly disclose that the digest is encrypted within the personal portable data carrier. Clark discloses that digital signatures (formed by encrypting a message digest with a private key) can be performed in smart cards (column 8, lines 53-58). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Linkser and Mazzagatte to include encrypting the digest within the personal portable data carrier, in order to prevent compromise of the sender's private key (see Clark, column 8, lines 57-62).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Davis et al, US Patent 5633932, discloses a method for preventing unauthorized persons from seeing secure documents that includes authenticating the intended recipient at the printing node.
  - b. Ginter et al, US Patent 6185683, discloses a system for secure delivery of items, including facsimile documents, that includes the use of digital certificates.
  - c. Debry, US Patent 6314521, discloses a method for using digital certificates to authenticate printers and network devices, including facsimile machines.



d. Chan et al, US Patent 6378070, discloses a method for secure printing that verifies that the intended recipient is the only one able to print a secure document.

e. DeBry, US Patent 6385728, discloses a method including the use of certificates for authorizing a printer to receive and print a document from a client.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-

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3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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